

Listing of Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Previously Presented) An analog for supporting an article that is used to develop a dental prosthesis, comprising:

a main body for being anchored in a model of a mouth of a patient, said main body being unthreaded and including a longitudinally extending flat region for engaging said model to resist the rotation of said analog within said model;

an upper surface on said main body for contacting said article;

an upper groove extending inward along a periphery of said main body below said upper surface for receiving a soft tissue modeling material that replicates gingival tissue; and

a lower region on said main body below said upper groove and opposite said upper surface, said lower region including a lowermost section that includes a lowermost surface of said main body, said lower region further including a model-retention section located above said lowermost section and said lowermost surface, said model-retention section having a smaller transverse dimension than said lowermost section for axially retaining said implant analog within said model.

2. (Previously Presented) The analog of claim 1, wherein said smaller transverse dimension is defined by a lower groove within said lower region on said main body.

3. (Original) The analog of claim 1, further including a polygonal fitting at said upper surface for non-rotationally engaging said article.
4. (Original) The analog of claim 3, wherein said polygonal fitting is a hexagonal boss extending upward from said upper surface.
5. (Original) The analog of claim 3, wherein said polygonal fitting is a polygonal socket extending inwardly into said upper surface.
6. (Previously Presented) The analog of claim 1, wherein said upper groove extends entirely around said periphery of said main body.
7. (Previously Presented) The analog of claim 1, wherein said upper groove is defined by a surface that is curvilinear when said analog is viewed from a side.
8. (Previously Presented) The analog of claim 1, wherein said upper groove is defined by a plurality of surfaces that extend inwardly into said main body, adjacent ones of said plurality of surfaces being joined at a corner.
9. (Original) The analog of claim 8, wherein said plurality of surfaces are two surfaces, said groove having a V-shaped profile when said analog is viewed from a side.
10. (Previously Presented) The analog of claim 1, wherein said upper groove is located within about 1 mm of said upper surface.
11. (Previously Presented) The analog of claim 1, in combination with said soft tissue modeling material.
12. (Previously Presented) The analog of claim 1, wherein said upper groove extends inwardly toward a central axis of said main body by at least 0.5 mm.

13. (Previously Presented) The analog of claim 1, wherein a transverse dimension of said main body within said upper groove is between about 60% to about 80% of a transverse dimension adjacent to said groove.

14. (Previously Presented) The analog of claim 1, wherein said analog replicates a dental implant.

15. (Previously Presented) The analog of claim 1, wherein said analog replicates a dental implant and a post coupled to said dental implant, said dental prosthesis residing around said post.

16. (Previously Presented) The analog of claim 1, wherein said upper groove is comprised of at least one dimple on said analog.

17. (Previously Presented) An analog for supporting an article that is used to develop a dental prosthesis in combination with soft tissue modeling material, said analog within said combination comprising:

a main body for being anchored in a model of a mouth of a patient;

an upper surface on said main body including a polygonal fitting for contacting said article; and

a groove extending inward to said main body by at least about 0.5 mm receiving said soft modeling material that replicates gingival tissue, said groove being within about 1 mm of said upper surface.

18. (Previously Presented) The combination of claim 17, where said groove extends entirely around said periphery of said main body.

19. (Previously Presented) The combination of claim 17, wherein said groove provides a tactile feedback positioning mechanism with said soft modeling material.
20. (Previously Presented) The combination of claim 17, wherein said groove is comprised of at least one dimple on said analog.
21. (Original) A method of developing a dental prosthesis, comprising:
- taking an impression in a mouth at a site where a dental implant is located;
 - removing said impression from said mouth;
 - installing an implant analog in said impression at said site where said dental implant was located, said implant analog including a groove;
 - adding a modeling material into said impression at a region where said implant analog is located, a portion of said modeling material residing within said groove;
 - allowing said modeling material to harden into a resilient, soft tissue model that includes a rib defined by said portion of said modeling material;
 - developing a stone model from said impression that replicates said site, said groove of said implant analog being exposed outside of said stone model;
 - crafting a core of said dental prosthesis on said implant analog including the steps of removing said soft tissue model from said stone model and accurately reinstalling said soft tissue model onto said stone model with said rib engaging said groove;
 - and
 - adding a tooth replicating material to said core.

22. (Original) The method of claim 21, wherein said step of developing said stone model includes adding material used for said stone model into said impression onto said resilient, soft tissue model.

23. (Original) The method of claim 22, wherein said steps of removing said soft tissue model from and reinstalling said soft tissue model on said stone model includes, respectively, disengaging and engaging said rib and said groove with a tactile feedback.

24. (Original) A laboratory device used in the process of developing a dental prosthesis, comprising:

hard modeling material generally replicating a region in a mouth that is located near a site where said dental prosthesis is to be mounted;

an analog located within said hard modeling material and having a region that is exposed outside of said hard modeling material, said region including a first cross-sectional dimension that is measured at a first height location nearer to said hard modeling material and a second cross-sectional dimension that is measured at a second height location further away from said hard modeling material, said first cross-sectional dimension being less than said second cross-sectional dimension; and

soft tissue modeling material positioned over said hard modeling material and including an aperture through which said analog extends, said soft tissue modeling material including a grasping region adjacent to said aperture that engages said implant analog between said first and second height locations.

25. (Original) The laboratory device of claim 24, wherein said analog includes a groove within said region, said first cross-sectional dimension being measured within said groove and said second cross-sectional dimension being measured above said groove nearer to an upper surface of said analog.

26. (Original) The laboratory device of claim 24, wherein said analog includes an outwardly extending circumferential rib within said region, said first cross-sectional dimension being measured below said rib and said second cross-sectional dimension being measured along said rib.

27. (Original) The laboratory device of claim 24, wherein said analog is an analog of only a dental implant.

28. (Original) The laboratory device of claim 24, wherein said analog is an analog of a dental implant and a post extending away from said dental implant, said dental prosthesis is to be positioned around said post.

29. (Original) The laboratory device of claim 24, further including a second analog located within said hard modeling material, said second implant analog having an exposed region outside of said hard modeling material that is configured similar to said analog.

30. (Previously Presented) An analog for supporting an article that is used to develop a dental prosthesis in combination with soft tissue modeling material, said analog within said combination comprising:

a main body for being anchored in a model of a mouth of a patient, said body having a central axis;

an upper surface on said body for contacting said article; and

a surface extending inwardly toward said central axis below said upper surface engaging said soft tissue modeling material and creating an undercut in said soft tissue modeling material that replicates gingival tissue, said extending surface that engages said soft tissue modeling material being within about 3 mm of said upper surface.

31. (Previously Presented) The combination of claim 30 wherein said surface is formed on an underside of a rib protruding outwardly from said main body.
32. (Previously Presented) The combination of claim 30, wherein said surface is formed as an interior surface of a groove extending inwardly into said main body.
33. (Previously Presented) The combination of claim 30, wherein said surface provides a tactile feedback mechanism with said soft tissue modeling material.